



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Attorney Docket No. KAK-004**

In re patent application of

Hiroaki KITANO et al.

Serial No. 10/018,571

Group Art Unit: 2152

Filed: December 20, 2001

Examiner: unassigned

Title: *METHOD AND DEVICE FOR NETWORK INFERENCE*

**RECEIVED**

SEP 23 2002

INFORMATION DISCLOSURE STATEMENT

Technology Center 2100

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO-1449 is a listing of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR 1.56. Applicant respectfully requests that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

A copy of each listed document is being submitted to comply with the provisions of 37 CFR §§1.97 and 1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* prior art reference against the claims of the present application.

Concise Explanation of Relevancy of the Document  
(Fill out if no English translation, partial translation or English abstract is available)

Any document having neither English translation nor English abstract (Documents B2, B8 and B9) has been cited in a communication from a foreign patent office in a counterpart foreign application or international application, or its related application. A copy of the communication is attached hereto, accompanied by English translation of at least relevant part,

if it is not in English. English translation of the document is not readily available; however, the absence of such translations does not relieve the PTO from its duty to consider the submitted document (37 C.F.R. §1.98 and MPEP §609). Further, Document B1 is a U.S. patent corresponding to Document B2.

- 1. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits in the present application. No fee is required (37 C.F.R. §1.97(b)). If, however, a first Office Action on the merits is issued, please charge deposit account 18-0013 in the amount of \$180.00 for payment of the fee under 37 CFR §1.17(p).
- 2. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 18-0013 as needed to ensure consideration of the disclosed information.

Respectfully submitted,

Date: September 20, 2002



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FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. KAK-004	SERIAL NO. 10/018.571
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>		APPLICANT KITANA et al.	
		FILING DATE 12/20/01	GROUP 2152

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
B1	5,140,530	8/92	Guha et al.			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO PART.
B2	2881711	02/99	JAPAN			X
B3	WO98/30722	07/98	WIPO			RECEIVED
						SEP 23 2002
						Technology Center 2100

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

B4	T. Yada et al., "Signal Pattern Extraction from DNA Sequences Using Hidden Markov Model and Genetic Algorithm," Transactions of Information Processing Society of Japan, Vol. 37, No. 6, Pages 1117 through 1129, Information Processing Society of Japan (June 1996).
B5	T. Akutsu et al., "A Learning Theory for Identifying Gene Regulatory Networks," 32 <sup>nd</sup> Artificial Intelligence Fundamental Theory Study Group Material, pages 37-42, Japanese Society for Artificial Intelligence (March 1998).
B6	D. Tominaga et al., "Design of Canonical Model Describing Complex Nonlinear Dynamics," Computer Applications in Biotechnology, pages 85-90, IFAC (1998).
B7	T. Yada et al., "Generation of Hidden Markov Model Describing Complex Motif in DNA Sequences," Transactions of Information Processing Society of Japan, Vol. 40, No. 2, Information Processing Society of Japan (February 1999).
B8	T. Akutsu, "Inference Algorithm in Gene Networks," Suri-Kagaku (Mathematical and Physical Science, Vol. 37, No. 6 (No. 432), pages 40-46, Science (June 1999).
B9	H. Kitano, "Trial toward System Biology," Suri-Kagaku (Mathematical and Physical Science, Vol. 37, No. 6 (No. 432), pages 54-60, Science (June 1999).
B10	T. Akutsu et al., "Inferring Genetic Network Using Linear Programming," Proceedings of the 13 <sup>th</sup> Annual Conference of JSAI, 1999, pages 328-329, Japanese Society of Artificial Intelligence (June 1999).

EXAMINER	DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.